

black-brown stiffer hairs; whiskers very long, black; upper lip, lower side of head, throat, chest, underside of body, and inner side of limbs pure white; ears rather large, naked; tail elongate, rather longer than body and head, rather thick at the base, tapering, black, terminal quarter white; feet covered with very short hair; claws strong, naked.

Skull elongate, $2\frac{1}{3}$ inches long, and $1\frac{1}{6}$ inch broad at the zygomatic arch. Nearly the same size as the skull of *Bandicota gigantea*; but the forehead is much more curved down, the cavity in front of the orbit is smaller, and the front edge of the cavity is not thickened on the front margin, and is furnished with an acute, subcentral, conical projection, contracting on the upper part of the perpendicular cleft. Teeth bright yellow and much incurved. Palatine slits rather short, not more than two thirds the length of the slits in *B. gigantea*, nor nearly so long as they are in the much smaller *Mus decumanus*.

Mus.

Skull elongate, twice as long as broad at the hinder edge of the orbit. The slit in front of the orbit narrow, elongate, extended above into an oval cavity. Slit in the front of the palate elongate.

Mus decumanus, *M. rattus*, *M. indicus*, *M. piloides*, *M. cervinipes*, *Holochilus brasiliensis*, *H. cephalotes*, and *Mus alexandrinus*, which has the slit in front of the nostrils shorter and wider than the rest, as is also the case with *Laggada platythrix*, *L. boodunga*, *Golunda barbara*, and *G. meltada*: these have the front teeth smooth; *G. Ellioti* has the front teeth with a central longitudinal groove.

BIBLIOGRAPHICAL NOTICES.

The Sea and its Living Wonders; a Popular Account of the Marvels of the Deep, and of the Progress of Maritime Discovery from the earliest ages to the present time. By Dr. G. HARTWIG. 4th edition. 8vo. Longmans: London, 1873.

ON the appearance of the first edition of this book we gave a notice of its contents in this journal; and it is with pleasure that we now announce the publication of a fourth edition. Dr. Hartwig's volume is undoubtedly one of the best of the tolerably numerous class to which it belongs; and it is rather to be wondered that it has not secured even a wider sale than would seem to be indicated by the number of editions which it has reached.

In the new edition the general treatment of the subject is the same as in former issues; but the author has made many important addi-

tions and alterations. The book opens with a short treatise on the physical geography of the sea, in which we have a picturesque general description of the sea, its waves, tides, and currents, and their causes, and of the "aerial and terrestrial migrations of the waters," the latter including an account of the winds and of the circulation of the water evaporated from the ocean through the atmosphere to the surface of the land and back again to its source. To this section of the book the author has added two new chapters, containing descriptions of some marine caves and of certain marine constructions, chiefly lighthouses.

It is to the second part of his work, which treats of the inhabitants of the sea, that the author has evidently devoted his chief attention; and he has succeeded in giving a good popular account of the principal forms of marine animals and plants. In comparing this section of Dr. Hartwig's book with that in the first edition, we find that, without making it very technical, he has put it in such a form as to convey a very fair general notion of the modern classification of animals and of the peculiarities characteristic of the chief types belonging to each great group which is represented among the population of the sea; the chapter on the Crustacea has been reconstructed and made much fuller, especially with respect to the metamorphoses which most of those animals undergo; a brief account of some marine Rotifera has been appended to the chapter on marine worms; the description of the Mollusca has been considerably added to and improved; and the account of the Cœlenterata has been entirely rewritten on quite a new plan. We notice also that the Diatoms have been removed from their former position among the Infusoria and placed with the marine plants. In the chapter on the geographical distribution of marine life, Dr. Hartwig has availed himself of the results obtained by recent researches in the abyssal waters of the Atlantic.

The third and concluding part of the book is devoted to a brief sketch of the history of maritime discovery, with which we have nothing to do here, but which will doubtless enhance its value in the eyes of those young readers for whose delectation it is particularly designed. On the whole we are not acquainted with any better gift-book than Dr. Hartwig's volume, almost the only defect of which consists in the miserably small size and generally poor execution of many of its numerous natural-history illustrations. We notice, however, as a sign of better things, that most of the new woodcuts are on a larger scale and fairly executed; so that we may hope in course of time, as more editions are called for, the paltry little old blocks will be gradually eliminated.

Outlines of Natural History for Beginners, being Descriptions of a Progressive Series of Zoological Types. By H. ALLEYNE NICHOLSON, M.D. &c. 12mo. Blackwood: Edinburgh and London, 1873.

DR. NICHOLSON has added one more to his already long list of educational works; but we do not think that his 'Outlines of